



# Dworshak Fisheries Complex

## Monthly Activity Report



January 2015

U.S. Fish & Wildlife Service, Region 1

Volume 4, Issue 3

### Highlights:

#### First Steelhead Spawning Day January 13!

- **Total Fish , Alevins,  
Eyed Eggs on station  
at Dworshak:**  
8,582,317
- **Total Fish on station at  
Kooskia:**
  - SCS smolts 661,712
  - SCS sac fry 873,979

### Inside this issue:

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### Manager's Message



Steve Rodgers, Complex Manager

For this month's MAR, I'm going to talk about I & E (Information and Education), or Outreach as it's often called. I believe public outreach is a responsibility of every employee in public service, and it's extremely important in small communities like ours.

Outreach is a positive way for government entities, businesses, and other organizations to communicate with vested stakeholders and partners. Those communications can cover anything, but usually focus on mission and purpose. Outreach covers big topics like climate change or small things like details on a free fishing day. It can be as grand as a public information campaign, or as intimate as a question answered. Outreach is important because it connects us with our customers, which in our case is the fishing public and others that care about anadromous fish. Outreach allows us to tell our story.

Outreach comes in many forms, from newspaper articles to websites, from assigned staff in "headquarters" to a local representative like Jill Olson here at DNFH. But it goes beyond just folks that are specifically tasked with outreach. It includes all of us that work for the Service or Tribe, representing our organization everywhere we go.

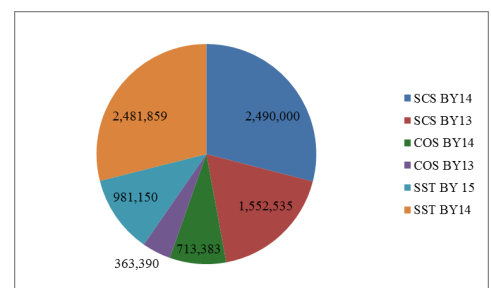
Many of us would rather not deal with questions from the public or speak on behalf of our employer, and we're not expected to, beyond basic professionalism and courtesy. That means answering questions accurately when we can, or seeking the correct answer and following up, or directing folks to the place where they can find the information they seek. It includes representing your employer when appropriate, or providing only personal opinion, and knowing the difference. It always requires discretion about what information can be shared and what information cannot. This can be tricky, and when in doubt it's always best to pass information requests up the chain of command.

I feel there is an opportunity for strong outreach here locally we're not taking advantage of. My wife works for a small business in town, and every year they help decorate the city park for Christmas. Most of the businesses in town do that. Many businesses are involved in parades and other community events. Why aren't we involved in these kinds of activities that strengthen our relationship with the community? Why don't the local schools send their kids to our hatcheries for a tour, when other schools from further away come year after year? How come there isn't a fish planting truck in the parade in-between the countless logging trucks throwing candy to the kids? I know we used to do this kind of outreach, how come we don't now?

We do have a wonderful free fishing day derby at Tunnel Pond, and many of you make that happen every year through countless hours of volunteering. I want to thank each of you for that dedication, and encourage all of us to do more. That includes me... I need to do better to connect Dworshak Fisheries Complex with the community.

In the coming months, I will be looking for opportunities to strengthen our bond with the local community. I realize we are limited in what we can do within policy and rules, and also within shrinking budgets. However, I'm confident there are some opportunities and I'm going to take advantage of them. We're one of the largest employers in the valley, and a critically important component of the local economy. It's time we get reengaged in our part of the world and help make a difference. I hope that each of you, in your own way, can help as well. From leading a tour to answering a question in the grocery store or on the river bank, we're all conducting outreach. If you have ideas on how we can do it better, please let me know.

Figure 1. January 31, 2015: Total fish on station.



We're going to miss you !



Credit: Jill Olson USFWS

After 12 years of service Penny Hasenoehrl retired from the administration office here at Dworshak Fisheries Complex on January 8, 2015



Credit: Jill Olson USFWS

One last phone call before Penny left the office!



Credit: Jill Olson USFWS

Steve Bradbury accepted a position with the Army Corps of Engineers at the Dworshak Project up the road! His last day with us was January 23!

## Hatchery Headlines: *Dworshak Spring Chinook Salmon*

**Brood Year 2013 (BY13)** - At the end of January there were 1,552,535 fish in 30 RWs averaging 27 fpp (5.0 inches). Mortality was 0.08% (1,214). There are three distinct ponding groups: Low-density, high-density, and flow study. Each group can be identified through parental based tagging (PBT). Raceway flow averaged 740 gpm and water temperature was 43 degrees. Fish health reports indicated healthy fish with adequate pyloric fat (70%) no sign of disease. Fish are on track to be released early April at 22 fpp.

**Brood Year 2014 (BY14)** - Chinook eggs eyed and were enumerated in November. There are 2.49 million alevin currently in Dworshak production. Percent mortality from eye to hatch was 1.2%. Alevin are being incubated on secondary reservoir water chilled to 37 degrees. Ponding is scheduled for mid-April.

## Hatchery Headlines: *Dworshak Summer Steelhead (SST)*

**Brood Year 2014** - There were 2,481,859 SST in the Burrow's Ponds at the end of December averaging 9 fpp (6.89 inches). There were 1,601 mortalities (0.10%). All fish are being reared on river water at about 700 gpm and water temperature was 43 degrees. Fish are on track to be released in April at 6 fpp.

**Brood Year 2015** - Early spawning occurred in January. There were two takes where 150 females were spawned providing approximately 981,150 green eggs. There were 119 females spawned at take 1 on January 13, 2015, and 31 females spawned at take 2 on January 20, 2015. The third egg take will be on February 10, 2015 where 62 females will be air spawned for the CRITFC/NPT Kelt program. There were 138 fish donated to the food bank, and no eggs shipped for outreach/research purposes.

## Hatchery Headlines: *Dworshak Coho Salmon (COS)*

**Brood Year 2013** At the end of January there were 363,390 Coho in 5 Burrow's ponds. Coho averaged 27 fpp (4.7"). Mortality was 0.04% (158 individuals). The full Coho report can be seen on page 4.

**Brood Year 2014** There are 713,383 BY14 eggs in DNFH A-Bank. Alevin are being incubated on chilled water (39°F).

**Table 1. Total Production—Fish on Station (01/31/15).**

SP	BY	Location	Number	Wt (lbs)	FPP	L in	L mm
SCS	13	RWs 1-30	1,552,535	57,546	27	5.0	127
SCS	14	alevin/incubation	2,490,000				
COS	13	BP 74-82	363,390	13,536	26.85	4.7	120
COS	14	alevin	713,383				
SST	15	eggs	981,150				
SST	14	Systems	2,481,859	284,708	9	6.9	175
<b>Total Fish/Fry on Station</b>			<b>8,582,317</b>	<b>355,790</b>			

## **Hatchery Headlines: *Kooskia***

This activity report is implemented by the Tribal Fish Hatchery Manager, Kent Hills. All information in this report was collected and or performed by the hatchery staff during the preceding month.

Under SRBA and the Clearwater Annual Operating Plan, the Tribe, Service and Idaho Fish & Game have agreed to implement other fish production actions related to KNFH mitigation. Reports will include additional information about other species reared, processed and released in relation to KNFH operations.

### **Kooskia Chinook Brood Year 2013**

There are 661,712 Chinook smolts on station at 28.1 fish per pound; they are 4.9 inches (125 mm). These fish were fed 1,156 pounds of feed. Total mortality of 134, the fish were on creek water at an average of 37 degrees F. Fish health was out at the end of the month to perform fish evaluation for January samples showed low levels of gill parasites and low levels of skin parasites all had food in the digestive track. Idaho Fish Health Center will be out the first part of February to perform the fish release evaluations.

### **Kooskia Chinook Brood Year 2014**

There are 873,979 sack fry on station; they are on 40 degrees F water in 17 incubation stacks. We had a total mortality of 20,760 Three trays were culled due to all being deformed (curly quered) 12,035 and mort were picked from the remaining tray which also had a lot of genetic deformities 8,725.

### **Kooskia Adult Coho Trap Operations:**

Trap is closed

### **Kooskia Training and conferences for Month of January:**

Kent attended an AOP meeting on the 6th.

Kent attended a SRBA meeting on the 7th.

Kent attended a meeting concerning increased eggs egg and broodstock at Dworshak on the 12th.

Kent attended a demonstration of the "Whoosh" at Dworshak on the 13th.

Fish and Wild Life Assistant Director toured Kooskia Hatchery and had lunch with the crew on the 14th.

Kent traveled to Clearwater Hatchery for a conference call meeting with Lyons Ferry Hatchery on increased egg production on the 15th.

Kent traveled to Dworshak to meet with Anna about ordering procedures on the 28th.

Kent to Lapwai for a meeting on the 29th.

## Hatchery Headlines: Nez Perce Tribal Fisheries At Dworshak Performance January 2015

The inventory of BY13 Coho on February 1st showed a total of 63,390 Clearwater stock Coho in five Burrows Ponds (74, 76, 78, 80, and 82).

**Table 1. Brood year 2013 Coho inventory as of February 1, 2015.**

	Number of Fish	Weight (lbs.)	FPP (average)	Length (inch)
<b>BP 74</b>	80056	2950	27.14	4.72
<b>BP 76</b>	79495	2877	27.63	4.69
<b>BP 78</b>	79909	2825	28.29	4.66
<b>BP 80</b>	51706	1871	27.63	4.69
<b>BP 82</b>	72224	3013	23.97	4.92
<b>TOTALS</b>	<b>363,390</b>	<b>13,536</b>	<b>26.93</b>	<b>4.74</b>

### MORTALITY:

- o The average percent mortality for Clearwater stock Coho for the month was 0.04%.
- o Total monthly mortality after inventory was 158 collected by staff.

### GROWTH:

- DNFH* - Average fish per pound (fpp) decreased from 32.5 fpp to 26.67 fpp..
- Average length increased from 4.45 inches to 4.69 inches.

- KNFH* - Average fpp decreased from 27.24 fpp to 23.93 fpp.
- Average length increased from 4.72 inches to 4.92 inches.
  - Overall average fpp decreased from 31.43 fpp to 29.93 fpp.
  - Overall average length increased from 4.5 inches to 4.74 inches.

### FEED:

- o A total of 1848 pounds Bio-Oregon's BioPro starter 2.0 mm feed was fed for the month @ \$2,226.84.

### FISH HEALTH:

- o Monthly fish health samples were collected by Corrie Samson. Steve Coomer reported an increase of fish with eroded noses. Samples were collected and confirmed positive for Cold Water Disease. See fish health case number 15-076.

REPORTS: NA

MEETINGS/TRAINING: None

(Continued page 8)



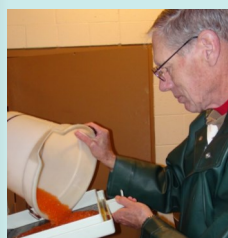
Credit: Jill Olson USFWS

Volunteer John Schwartz and Steve Jeffers take milt from adult steelhead.



Credit: Jill Olson USFWS.

FRO staff check female SST for coded-wire tags.



Credit: Jill Olson USFWS.

Volunteer David Loranger sets up steelhead eggs.



## Idaho Fish Health Center—January 2015

**Bacteriology:** Rick helped Laura with preparing *Renibacterium salmoninarum* (R.sal) FITC conjugated antibody for DFAT. Laura finished up R. sal FAT's. Coho were found to be positive for CWD, which was confirmed by PCR. Laura trained Alicia, a veterinary extern, how to run API strips.

**Virology:** Corie, along with veterinarian extern Alicia Morse, ran a total of 68 samples representing 128 fish from Dworshak NFH, Nez Perce Tribe Kelt program, Lyons Ferry WDFW Hatchery, and the Wild Fish Survey. They also ran 102 blind passes representing 150 fish from Dworshak NFH and the Kootenai Tribe of Idaho.

**PCR:** Rick confirmed one suspect *Myxobolus cerebralis* sample from the Wild Fish Health Survey by nested PCR and was assisted by Alicia Morse, veterinarian intern. Corie provided Rick and Alicia with 23 IHNv suspect samples from cell culture that were confirmed by reverse transcriptase real time PCR. Chelsea Weeks volunteered and helped extract and process *Nucleospora salmonis* (NS) PCR samples from wild fish, viral pellets and Hagerman NFH collected in Nov and Dec. These samples totaled 177.

**Parasitology:** Rick screened four cases representing 92 samples from the Wild fish Health Survey for *Myxobolus cerebralis* by pepsin-trypsin digest (PTD).

### FWS Hatcheries

**Kooskia:** Guppy visited Kooskia with veterinary student Alicia Morse on 1/29. Fish appeared healthy at this time, and samples were taken for Bacterial Kidney Disease monitoring by the ELISA test.

**Hagerman:** Rick visited Hagerman NFH, January 22 to conduct the monthly monitoring. Juvenile steelhead trout were checked in the 3 raceway decks and rainbow trout in the nursery building. No flashing was observed in the all three decks. One moribund steelhead from the middle deck had external lesions and a swollen pale kidney. Samples were also collected from the RAS and RAS controls. Fin condition continues to improve in the RAS circulars. Craig Eaton, hatchery manager, provided Rick with an extensive tour of the water supply system for Hagerman.

**Dworshak:** Laura and Corie took fish health samples and performed GnRH hormone evaluation according to the INAD at the Take 1 early steelhead trout spawning.

Rick and Laura assisted with the fish health inspection during Take 2 early steelhead trout spawning. Corie and Guppy took GnRH evaluation samples.

Rick conducted one diagnostic case for spring Chinook salmon in raceway 16 with deformed backs. Vertebrae were damaged, but cause was not determined.

Rick conducted routine monitoring for juvenile steelhead trout in System 3 with the assistance from Alicia Morse, veterinarian intern. External protozoa and *Gyrodactylus* were seen in the skin scrapes from steelhead trout in System 3. Rick conducted the monthly monitoring of the low and high density SCS raceway project. SCS in both densities are in good condition at this time.

Guppy examined Dworshak steelhead in system 2 for routine monitoring with help from veterinary student Alicia Morse on 1/27. Only light parasites were seen.

Laura examined Dworshak steelhead in system 1 for routine monitoring on 1/6, no parasites seen. Laura examined them again with help from veterinary student Alicia Morse on 1/27. Heavy loads of *Gyrodactylus* were observed and a treatment was recommended.

### NEZ PERCE TRIBE:

Fish health inspection for the Fall Chinook Acclimation Program import permit was performed by Corie, Laura, Alicia and Guppy on 1/22.

Laura with the help of Alicia, performed monthly monitoring at NPTH on 1/19. Very low levels of ICH were observed. First ponding of FCS fry was occurring on this day as well.

Corie and Alicia performed the monthly monitoring on the Coho. Eroded noses had been reported. A few fish were examined that had eroded noses. Bacteriology was performed on the kidneys and *F. psychrophilum* was detected. A Veterinary Feed Directive (VFD) was signed by Guppy to order and treat all ponds of Coho with Florfenicol for coldwater disease.

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## Maintenance & Operations Activities

January 2015

### Dworshak -

We're winding down on our big push to clean up the Hatchery complex. It's getting down to the nitty-gritty and things are really shaping up.

Our next issue is getting the necessary paperwork completed and off to Walla Walla so that unneeded and outdated equipment can be surplused.

The correct motor shaft arrived for the system 1, supply pump 1 and has been successfully installed. Pump 1 is now up and running.

New conduit, wiring and repairs for the underpass sump pump is wrapping up. There is a little clean-up and landscaping needed due to the trenching required to complete this project.

A new plumbed eye wash station has been installed in the spawning area, replacing the stand-alone unit that was there. This should alleviate the need for water changes as required by safety regulations.

Completed office remodel upstairs in the main building to include new window that will act as a visitor information desk.

Replaced circulation pump that supplies heated water for the heat registers upstairs in the main building.

We have taken pictures of the equipment that has been stored at what we call, the bone yard. The pictures are on the m-drive and available to all to look at if they are in need of something that we may have stored up there.

And as always, we continue to complete Preventative maintenance work orders as they come due.

### Kooskia -

Jan 03: Upon routine inspection of the screen chamber at the intake, a large amount of slush ice was found, several trips were made to clear the ice, Kenny and Gerry adjusted the water in attempt to keep the ice off the screens.

Jan 06: Lots of runoff water in the creek, requiring daily adjustments at the screen chamber.

Jan 07: Received parts for the new acclimation tanks.

Jan 08: Staff attended the retirement festivities for Penny at DW.

Jan 12: Gerry installed a new battery in the Gator.

Jan 13: Gerry picked up the Hustler mower from servicing in Lewiston. Staff discussed plans for egg preparation for the upcoming year.

Jan 14: Roy Elicker, USFWS Assistant Regional Director of Region 1, Becky Johnson Director of Production Nez Perce Fisheries, Steve Rogers, Dworshak Complex Manager and Rich Johnson USFWS arrived at Kooskia Hatchery for a tour of the facility and to discuss future projects and funding.

Jan 15: Kent & Gerry worked on Quarters #2 to locate and repair a water leak. Lucky Acres Fencing arrived to install the posts for the new Gate.

Jan 18: Kenny picked take 1 & 2 of BY14, mortality is low and the fry are looking good.

Jan 20: Gerry serviced mowers and other summer equipment, Kenny repaired Incubation trays.

Jan 21: Staff moved the recirculating tank parts under cover to protect them from the weather. Bruce McCloud visited the hatchery.



Credit NPT

Kooskia Fish Hatchery received parts for the new acclimation tanks..



Credit NPT

Roy Elicker, USFWS Assistant Regional Director of Region 1, Becky Johnson Director of Production Nez Perce Fisheries, Steve Rogers, Dworshak Complex Manager and Rich Johnson, USFWS, arrived at Kooskia Hatchery for a tour of the facility and to discuss future projects and funding.

**Idaho Fish Health Center**

(Continued from page 5)

Kootenai Tribe: Final inspection report for the Kootenai Rainbow trout was submitted to the Kootenai Tribe.

Wild Fish Survey: A single bull trout sample was submitted by AVISTA as part of the Cabinet Gorge passage. It was later determined that only 60 bull trout from the LPO gill nets needed to be sampled each year in the fall to meet Montana's import permit requirements in order to pass those fish over the dam.

Laura was successful in adding her and Ken Lujan to the Snake River Section 10 permit. She also summarized and submitted data to IDFG as required by her collecting permit.

Other:

The Idaho FHC enjoyed a visit by Fisheries Assistant Regional Director Roy Elicher and Fisheries Supervisor Rich Johnson during their tour of the Dworshak Complex on 1/13.

Rick attended the Rocky Plains Fish Health Workshop in Denver, Colorado, January 14 and 15, 2015. Topics of discussion included laboratory QC/QA, various PCR protocols, steatitis and updates from USFWS regional FHCs and state fish health programs.

Veterinary student Alicia Morse from University of Prince Edward Island visited the Idaho FHC for 2 weeks to gain fish health experience in the Northwest.

All available staff attended a national fish health center conference call hosted by Joel Bader, National Aquatic Animal Health Coordinator on 1/5. Guppy attended a Region One project leader call on 1/12. She cleaned up all FONS projects in ECOS as requested.

Guppy submitted the fish health section for the Dworshak Complex annual report for the Corps of Engineers.

Guppy attended the Clearwater AOP 2015 pre-meeting on Jan 6. She also submitted all Idaho FHC updates for the 2015 Clearwater Annual Operating Plan (AOP) document. Guppy attended an AOP subgroup meeting on 1/15 regarding the raising of Kooskia spring Chinook at Lyons Ferry Hatchery for BY15.

Short reports from all FWS FHCs in Region 1 and 8 were compiled and submitted by Guppy for the upcoming PNFHPC meeting in February.

Guppy participated on two national fish health center calls with HQ and two ARDs to discuss the future of the National Wild Fish Health Survey Program and its database on 1/13 and 1/28.

All available staff attended talk by Skretting representative Steve Boggio on recent changes and availability of fish feeds on 1/22 at Dworshak NFH.

Laura and Guppy submitted new budgets to the Nez Perce Tribe programs: Coho, Tribal Hatchery and FCAP to be evaluated.

Laura attended the Idaho Chapter AFS excomm call on 1/8.

**Maintenance & Operations Activities Kooskia**

(Continued from page 6)

Jan 23: A plumber arrived to estimate the replacement of the bath tub in quarters #2.

Jan 28: Staff began working on sheet rocking the shop.

Jan 29: Gerry cleaned the bone yard.

Jan 30: Plumber from Guardian arrived at the hatchery to bid the tub project in Quarters #2. Staff began pumping ground water from the adult building.

Jody sent pictures from  
The Kid's Ice Fishing  
Derby in Salmon, Idaho  
January 24, 2015!



Credit: Bob Rose USFS



Credit: Bob Rose USFS



Credit: Bob Rose USFS



Credit: Bob Rose USFS

Thanks Bob  
Great Pictures!

## Aquatic Conservation

January 2015

### Jody Brostrom –Salmon, Idaho

- Attended Fish Passage Training through the Fish Screen Oversight Committee. The training addressed fish passage through culverts, was held in Vancouver, WA. Field tours addressed different challenges faced when trying to restore passage when various partners and issues are involved. Included in the tour was a tide gate, which of course we don't have here in Idaho :)
- Working with Idaho Fish and Game on their State Wildlife Action Plan revision, specifically in the Beaverhead Ecological Section. We are identifying threats to a suite of species and habitats in the Beaverheads, and will be meeting in Boise January 29-29 to discuss further with other Ecoregions in Central Idaho.

### Ray Jones - Hatchery Monitoring and Evaluation

- The first meeting of the Dworshak NFH spring Chinook salmon production coordinatin group met on January 16th to coordinate activities for the spring. The current status of production groups and evaluation studies was reviewed.
- Staff attended AOP meetings at the Clearwater Hatchery to finalize the information and data in the 2015 AOP production tables and plans.
- PIT tagged 32,900 BY14 summer steelhead to evaluate juvenile travel times and adult returns for 4 release locations (Clear and Lolo Creeks, SF Clearwater River and Dworshak NFH).
- Staff met with Tom Tighe and Jeremy Sommer to develop summer steelhead spawning plans.
- Participated in Takes 1 and 2 for summer steelhead spawning; collected coded-wire tags; coordinated with the production staff to complete spawning activity reports for spawning takes 1 and 2.
- Staff met with Rod Engle and Steve Yundt to discuss LSRCP M&E Program.
- Samples were collected to measure on-station performance of spring Chinook salmon for the rearing density and flow evaluation projects.

### January Lamprey Research

- Participated in several lamprey Conservation Team meetings.

**January Administrative Actions** Staff met with Roy Elicker and Rich Johnson to discuss future actions for the FRO. Budgets and funding requests were developed regarding the FRO Project Leader position.

### Nez Perce Tribal Fisheries At Dworshak (continued from page 4) BY 14 EGGS:

- As of February 1st 2015 there are 713,383 BY14 eggs in DNFH A-Bank
- A total of 13,392 dead eggs picked off during the month of January (1.92%). All takes have hatched or started to hatch, crew has been de-shelling trays daily.
- 12/3/14 – 362,263 eyed eggs were transported to Eagle Creek NFH.
- 12/10/14 – 326,097 eyed eggs were transported to Eagle Creek NFH.
- 12/18/14 - 543,227 eyed eggs were transported to Cascade NFH.
- A total of 1,267,587 eyed eggs were transported





## Information and Education Corner



Dworshak–

Visitors: We had 33 visitors from 9 states.

Website Statistics: Page Loads - 364, Unique Visits– 281, First Time visitors - 241, Returning Visits 40;

Facebook Reach: 1,896 ; Engagements - 273

Tours: No on-site tours

Off-site: Outreach: None reported

Kooskia-

Visitors: There were 105 visitors to the hatchery during this month; this figure is compiled by staff.

## Staff List

### *Complex Management*

Steve Rodgers, Complex Manager

Mark Drobish, Dworshak NFH Manager

Mike Tuell, SRBA Coordinator

Dr. Marilyn “Guppy” Blair, Idaho Fish Health Ctr.

Mike Faler, Aquatic Conservation Lead

Adam Izbicki, Maintenance Supervisor

Dr. William Conner , Fall Chinook Research Lead

Kent Hills, Kooskia NFH Manager

Dr. Chris Peery, Fish Production M&E Lead

### *Dworshak Production Staff*

Adam Izbicki, Jeremy Sommer, Jill Olson,

Angela Feldmann, Tom Tighe, Rob Bohn, Wayne Hamilton, Mike Bisbee, Tui Moliga, Lou Ann Lasswell, Steve Coomer, Carter Lopez, Casey Mitchell

### *Administration*

Penny Hasenoehrl, Steve Bradbury, Randy Bowen

### *Maintenance*

Scott Koehler, Terry Weeks, Rick King, Rob Kellar, James Oatman, James Paddelty, Melissa Wright, Joe Livesay

### *Idaho Fish Health Center*

Laura Sprague, Corie Samson, Rick Cordes,

### *Idaho Fishery Resource Office*

Ray Jones, Aaron Garcia, Carrie Bretz, Frank Mullins, Jody Brostrom, Ken Bugler, John Hook, Brad Buechel

### *Kooskia National Fish Hatchery*

Art Broncheau, Kenny Simpson, Gerry Fogelman